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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/066,000

12/09/2002

John C. Tsai

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02/23/2005

INTELLECTUAL PROPERTY LAW OFFICE  
1901 S. BASCOM AVENUE, SUITE 660  
CAMPBELL, CA 95008

EXAMINER

LYONS, MICHAEL A

ART UNIT

PAPER NUMBER

2877

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

CT

**Office Action Summary**

Application No.

10/066,000

Applicant(s)

TSAI ET AL.

Examiner

Michael A. Lyons

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 January 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

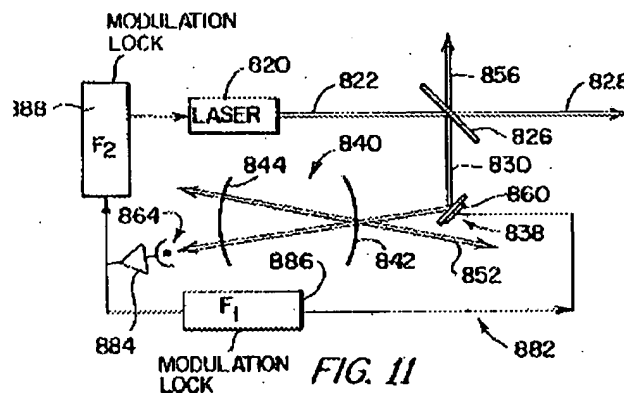
### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1-3, 6, 8 and 10-14 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Dahmani et al (4,907,237).**



Regarding claims 1, 6, and 8, Dahmani (Fig. 11) discloses an apparatus and corresponding method comprising a first beam splitter 826 to separate out a portion of the input light beam, confocal etalon 840 to receive the sample beam, a photodetector 864 to receive the beam from the etalon, and a link in the form of an amplifier 884 and a pair of frequency modulation lockers 886 and 888 to lock the frequency of laser 820 based on the signal received from the etalon.

Regarding claim 12, Dahmani discloses the use of confocal etalon 840.

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As for claims 2, 3, 10, 11, 13, and 14, Dahmani discloses curved mirrors 842, 844, for example, as the plates that create the confocal etalon.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 4-5, 7, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dahmani et al (4,907,237).**

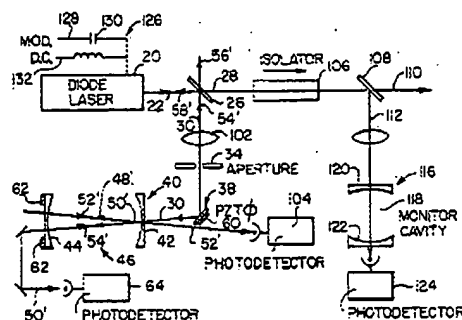


FIG. 2

As for claim 4, Dahmani discloses the claimed invention except for an explicit disclosure of a signal link or a processor. However, as disclosed above with regard to claim 1, Dahmani discloses a link in the form of an amplifier 884 and a pair of frequency modulation lockers 886 and 888 to lock the frequency of laser 820 based on the signal received from the etalon. Since the amplifier and modulation lockers perform the same function as a simple link between the photodetector and a processor such as a computer, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute a processor and system link for

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the elements of Dahmani, since Official Notice is taken of the functional equivalence of the amplifier and frequency modulation lockers to the link and the processor. The link serves to simply communicate the signal from the photodetector to the processor; the amplifier and frequency modulation locker are merely specialized forms performing the same function.

As for claims 5, 7, and 9, Dahmani, in an alternate embodiment (Fig. 2), discloses a second beam splitter 108 that receives a beam identical to the pre-etalon sample beam and a photodetector 124 that receives the signal after it passes through monitor cavity 118. While this isn't explicitly disclosed as a normalization signal, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the signal from this photodetector as a normalization signal, since the signal received by this photodetector is unaltered and would therefore provide a normal, reference-type signal. As for the links and processor, see the arguments above for claim 4.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Pat. 4,659,224 to Monchalin, US Pat. 4,884,276 to Dixon et al., and US Pat. 5,033,114 to Jayaraman et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Lyons whose telephone number is 571-272-2420. The examiner can normally be reached on Monday through Friday.

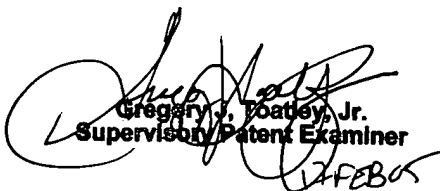
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J Toatley can be reached on 571-272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MAL

February 11, 2005

  
Gregory J. Toatley, Jr.  
Supervisor/Patent Examiner  
17 FEB 05